IRRIGATION SCHEDULE* [MIN/WEEK]													
VALVE# / TYPE	MONTHS												VALVE FLOW [GPM]
	J	F	M	A	M	J	J	A	S	O	N	D	
1/DRIP	40	100	200	400	380	500	600	400	250	150	80	30	17.11
2/DRIP	40	100	200	400	380	500	600	400	250	150	80	30	11.15
3/TREE	10	18	44	60	70	70	90	70	44	26	12	6	16.50
4/SHRUB	10	25	50	98	83	116	126	91	58	31	18	7	6.82
5/SHRUB	10	25	50	98	83	116	126	91	58	31	18	7	5.96
6/TREE	10	18	44	60	70	70	90	70	44	26	12	6	2.50
7/TREE	10	18	44	60	70	70	90	70	44	26	12	6	8.50
8/DRIP	40	100	200	400	380	500	600	400	250	150	80	30	11.43
9/DRIP	40	100	200	400	380	500	600	400	250	150	80	30	14.11
10/DRIP	40	100	200	400	380	500	600	400	250	150	80	30	10.08
11/TREE	10	18	44	60	70	70	90	70	44	26	12	6	14.50
12/SHRUB	10	25	50	98	83	116	126	91	58	31	18	7	11.08
13/DRIP	40	100	200	400	380	500	600	400	250	150	80	30	20.89
14/DRIP	40	100	200	400	380	500	600	400	250	150	80	30	23.68
15/SHRUB	10	25	50	98	83	116	126	91	58	31	18	7	7.84
16/SHRUB	10	25	50	98	83	116	126	91	58	31	18	7	22.68
17/TREE	10	18	44	60	70	70	90	70	44	26	12	6	13.50
18/TREE	10	18	44	60	70	70	90	70	44	26	12	6	11.00
19/SHRUB	10	25	50	98	83	116	126	91	58	31	18	7	26.08
20/TREE	10	18	44	60	70	70	90	70	44	26	12	6	2.00
21/DRIP	40	100	200	400	380	500	600	400	250	150	80	30	8.22
22/DRIP	40	100	200	400	380	500	600	400	250	150	80	30	16.25
23/TREE	10	18	44	60	70	70	90	70	44	26	12	6	2.50
24/TREE	10	18	44	60	70	70	90	70	44	26	12	6	11.00
25/SHRUB	10	25	50	98	83	116	126	91	58	31	18	7	35.72
26/DRIP	40	100	200	400	380	500	600	400	250	150	80	30	20.27
27/DRIP	40	100	200	400	380	500	600	400	250	150	80	30	19.91
28/TREE	10	18	44	60	70	70	90	70	44	26	12	6	20.50
29/TREE	10	18	44	60	70	70	90	70	44	26	12	6	8.50
30/TREE	10	18	44	60	70	70	90	70	44	26	12	6	8.00
31/DRIP	40	100	200	400	380	500	600	400	250	150	80	30	7.33
32/SHRUB	10	25	50	98	83	116	126	91	58	31	18	7	28.80

IRRIGATION SCHEDULE* [MIN/WEEK]													
VALVE# / TYPE	MONTHS												VALVE FLOW [GPM]
	J	F	M	A	M	J	J	A	S	O	N	D	
33/DRIP	40	100	200	400	380	500	600	400	250	150	80	30	3.25
34/DRIP	40	100	200	400	380	500	600	400	250	150	80	30	6.82
35/TREE	10	18	44	60	70	70	90	70	44	26	12	6	7.50
36/LAWN	20	50	100	196	166	232	252	182	116	62	36	14	32.00
37/LAWN	20	50	100	196	166	232	252	182	116	62	36	14	28.80
38/TREE	10	18	44	60	70	70	90	70	44	26	12	6	4.00
39/DRIP	40	100	200	400	380	500	600	400	250	150	80	30	1.04
40/TREE	10	18	44	60	70	70	90	70	44	26	12	6	1.50
41/SHRUB	10	25	50	98	83	116	126	91	58	31	18	7	19.20
42/SHRUB	10	25	50	98	83	116	126	91	58	31	18	7	±20
43/SHRUB	10	25	50	98	83	116	126	91	58	31	18	7	12.80
44/SHRUB	10	25	50	98	83	116	126	91	58	31	18	7	16.00
45/SHRUB	10	25	50	98	83	116	126	91	58	31	18	7	14.40
46/LAWN	20	50	100	196	166	232	252	182	116	62	36	14	16.40
47/LAWN	20	50	100	196	166	232	252	182	116	62	36	14	19.28
48/TREE	10	18	44	60	70	70	90	70	44	26	12	6	9.50
49/DRIP	40	100	200	400	380	500	600	400	250	150	80	30	8.49
50/TREE	10	18	44	60	70	70	90	70	44	26	12	6	17.00
51/DRIP	40	100	200	400	380	500	600	400	250	150	80	30	16.14
52/DRIP	40	100	200	400	380	500	600	400	250	150	80	30	9.33
53/DRIP	40	100	200	400	380	500	600	400	250	150	80	30	17.31
54/SHRUB	10	25	50	98	83	116	126	91	58	31	18	7	27.20
55/TREE	10	18	44	60	70	70	90	70	44	26	12	6	7.50
56/SHRUB	10	25	50	98	83	116	126	91	58	31	18	7	8.16
57/LAWN	20	50	100	196	166	232	252	182	116	62	36	14	28.80
58/SHRUB	10	25	50	98	83	116	126	91	58	31	18	7	52.80
59/SHRUB	10	25	50	98	83	116	126	91	58	31	18	7	±20
60/LAWN	20	50	100	196	166	232	252	182	116	62	36	14	31.50
61/LAWN	20	50	100	196	166	232	252	182	116	62	36	14	6.40
62/LAWN	20	50	100	196	166	232	252	182	116	62	36	14	9.00
63/SHRUB	10	25	50	98	83	116	126	91	58	31	18	7	16.00

*NOTES:
- CONTRACTOR TO FOLLOW CONTRACT SPECIFICATIONS WHEN PROGRAMMING WATERING SCHEDULE. SEE ALSO PROGRAMMING NOTE
- WHEN PROGRAMMING MULTIPLE VALVES/ZONES RUNNING SIMULTANEOUSLY THE SUM OF FLOW [GPM] OF EACH INDIVIDUAL ZONE SHALL NOT EXCEED 150 GPM
- THE ESTIMATED TIMES FOR EACH ZONE SHOWN IN THE IRRIGATION SCHEDULE ARE BASED ON SCHEDULE FROM THE CITY OF FRESNO WATER CONSERVATION PROGRAM AND ARE INTENDED AS A BASE REFERENCE. THE EXISTING SENTINEL SOFTWARE NEEDS TO BE RUNNING BASED ON ET WITCH WILL OVERRULE THE TIMES SHOWN IN THE ABOVE SCHEDULE
- CONTRACTOR TO COORDINATE WITH VA COR FOR IRRIGATION DATES AND TIME
- CONTRACTOR TO VERIFY WITH CITY OF FRESNO FOR ALLOWED IRRIGATION DAYS

IRRIGATION NOTES:

1. THIS DESIGN IS DIAGRAMMATIC. ALL LINES, VALVES AND EQUIPMENT SHOWN IN PAVED/CONCRETE AREAS AND BUILDINGS ARE FOR DESIGN CLARITY ONLY AND IS TO BE INSTALLED WITHIN PLANTING AREAS
2. AT POINTS WHERE LINES RUN ACROSS PAVED/CONCRETE AREAS, PIPES SHALL BE INSTALLED IN A SCH. 40 SLEEVE TWICE THE DIAMETER OF THE PIPE CARRIED. ALL SLEEVES TO BE INSTALLED WITH A MINIMUM DEPTH AS SHOWN ON THE SLEEVE TRENCHING DETAIL. SLEEVES TO EXTEND AT LEAST 12" PAST THE EDGE OF THE PAVING.
3. ALL HEADS ARE TO BE INSTALLED WITH THE NOZZLE, SCREEN AND ARCS SHOWN ON THE PLAN AND LEGEND.
4. ALL HEADS AND VALVES ARE TO BE ADJUSTED FOR OPTIMUM PERFORMANCE AND TO PREVENT OVERSPRAY ONTO BUILDINGS, WALLS, FENCES, ROADWAYS, AND HARDSCAPE. THIS INCLUDES AND IS NOT LIMITED TO: ADJUSTMENT OF DIFFUSER PIN OR ADJUSTMENT SCREW; REPLACEMENT OF PRESSURE COMPENSATING SCREENS; REPLACEMENT OF NOZZLES WITH MORE APPROPRIATE RADIUS UNITS; AND THE REPLACEMENT OF NOZZLES WITH ADJUSTABLE ARC UNITS.
5. CONTRACTOR TO TIE NEW 2 WIRE SYSTEM TO ALL NEW VALVES. CONTRACTOR TO REPAIR 2 WIRE SYSTEM IF NON-OPERATIONAL OR DAMAGED DURING CONSTRUCTION AT NO EXTRA COST TO THE VA
6. REPLACE ALL VALVE AS PER PLANS UNLESS NOTED OTHERWISE
7. ADD NEW VALVES AS PER PLANS
8. CONTRACTOR IS RESPONSIBLE TO ADAPT TO THE SIZE OF THE VALVE
9. USE DBR/Y-6 WIRE NUTS CONNECTORS
10. INSTALL 3/4"ø PVC SCH80 BALL VALVE AT BOTH ENDS OF EACH HEADER
11. INSTALL NETAFIN 6" SOIL STAPLE @ 10' O.C. (typ.)
12. CONTRACTOR TO PROGRAM ALL VALVES TO THE EXISTING AUTOMATIC CONTROL SYSTEM AS PER SCHEDULE

PROGRAMMING NOTE:

THE VA CAMPUS IRRIGATION SYSTEM IS EQUIPPED WITH A TORO SENTINEL FIELD CONTROLLER MODULE AS WELL AS PERTINENT COMPUTER HARDWARE AND SOFTWARE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROGRAMMING THE SENTINEL FIELD CONTROLLER TO CONTROL THE ENTIRE CAMPUS IRRIGATION SYSTEM ONCE ALL NEW IRRIGATION WORK IS COMPLETED, INCLUDING BUT NOT LIMITED TO NEW VALVES INSTALLATION.

THE CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH A TORO KNOWLEDGEABLE INSTRUCTOR TO PROGRAM THE SYSTEM IN ORDER TO GET THE FULL CONTROLLER SYSTEM HARDWARE AND SOFTWARE CAPABILITIES. DURING PROGRAMMING THERE SHALL BE COORDINATION BETWEEN THE TORO INSTRUCTOR, CONTRACTOR AND VA MAINTENANCE PERSONNEL IN ORDER TO OBTAIN A COORDINATED PROGRAM SET UP TO FULFILL NECESSITIES FROM THE VA (AREAS TO BE WATERED FIRST, TIME AND DATES, ETC) AND TO TEACH THEM THE PROCESS FOR FUTURE USE AT NO EXTRA COST TO THE VA

PROGRAMMING SHOULD TAKE ADVANTAGE OF THE FULL CONTROLLER SYSTEM HARDWARE AND SOFTWARE CAPABILITIES INCLUDING BUT NOT LIMITED TO:
- THE CONTROLLER SHALL BE PROGRAMMED TO RUN BASED ON "ET (EVAPOTRANSPIRATION)", MONITORING RAINFALL TO AUTOMATICALLY ADJUST RUN TIMES BASED ON ET DEMAND AND RAINFALL ACTIVITY
- MONITOR WEATHER SOURCE RELATED OPERATIONS
- TIME AND DAY SETUP
- WATERING DAY SCHEDULE
- ZONE DATA SETUP, WATERING START TIMES AND RUN TIMES
- RAIN DAYS
- PERCENTAGE SCALE
- SENTINEL WATCHER
- SHUT DOWN A SATELLITE SYSTEM WHEN MEASURED RAINFALL REACHES A PREDEFINED AMOUNT.
- EMERGENCY SHUT DOWN OF DAMAGED ZONES.

100% SUBMITTAL - FOR CONSTRUCTION

Revisions: | Date

CONSULTANTS:

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Drawing Title: IRRIGATION NOTES AND IRRIGATION SCHEDULE

Approved: Project Director

Project Title: SITE IRRIGATION AND LANDSCAPE IMPROVEMENTS

Location: 2615 E. Clinton Ave, Fresno, CA

Date: 1/3/2013 | Checked | Drawn

Project Number: 570-12-200

Building Number: CAMPUS

Drawing Number: CL108 Dwg. of —

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